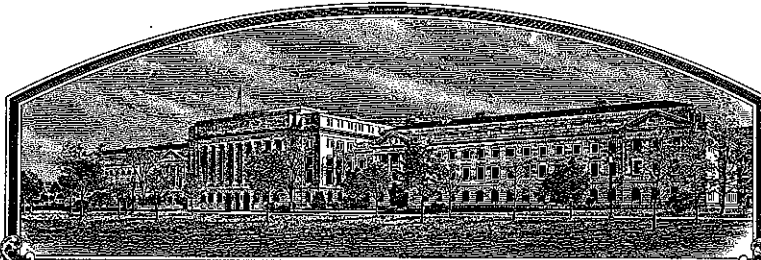


No.

200400161



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Wendell Seed of Oregon Inc. & Oregon Trail Seeds Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE FEE THEREON IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TRITICALE

'Forerunner'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifth day of June, in the year two thousand and six.

Attest:


Commissioner
Plant Variety Protection Office
Agricultural Marketing Service


Secretary of Agriculture

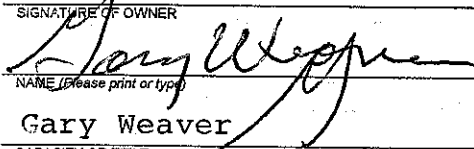
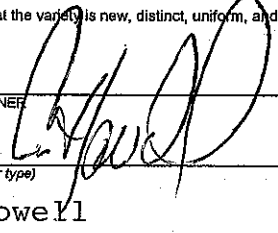


U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

| | | | | | |
|--|--|--|--|--|--|
| 1. NAME OF OWNER Weaver Seed of Oregon Inc. & Oregon Trail Seeds Inc. | | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME X-2210 | | 3. VARIETY NAME Forerunner | |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) P.O. Box 67 Crabtree, OR 97335 | | 5. TELEPHONE (include area code) (541) 924-9701 | | FOR OFFICIAL USE ONLY PVPO NUMBER 200400161 FILING DATE 3/29/2004 | |
| | | 6. FAX (include area code) (541) 924-9702 | | | |
| 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation | | 8. IF INCORPORATED, GIVE STATE OF INCORPORATION OR | | 9. DATE OF INCORPORATION 4-22-81 <i>Weaver</i> 5-3-93 <i>Howell</i> | |
| 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Fred B. Ledeboer 22068 Case Rd NE Aurora, OR 97002-9727 | | | | FILING AND EXAMINATION FEES: \$ 3652.00 DATE 3/29/2004 CERTIFICATION FEE: \$ 768.00 DATE 4/10/2006 | |
| 11. TELEPHONE (include area code) (503) 678-2597 | | 12. FAX (include area code) (503) 678-2272 | | 13. E-MAIL ledeboerfarms@centurytel.net | |
| 14. CROP KIND (Common Name) Triticale | | 16. FAMILY NAME (Botanical) Graminae | | 18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION. | |
| 15. GENUS AND SPECIES NAME OF CROP Tritosecale | | 17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | | |
| 19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) | | | | 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23) | |
| a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) | | | | 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED | |
| 23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) | | | | 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.) | |
| 24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) | | | | | |
| 25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. | | | | | |
| The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. | | | | | |
| Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. | | | | | |
| SIGNATURE OF OWNER  | | | SIGNATURE OF OWNER  | | |
| NAME (Please print or type) Gary Weaver | | | NAME (Please print or type) Curt Howell | | |
| CAPACITY OR TITLE President, | | DATE | | CAPACITY OR TITLE Owner, | |
| Weaver Seeds of Oregon | | | | Oregon Trail Seeds | |

(See reverse for instructions and information collection burden statement)

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

September 18, 2003, first Breeder seed of Foreunner was sold from Weaver Seed of Oregon, Inc. to Oregon Trail Seeds, Inc.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit AOrigin and Breeding History

Forerunner is a tall selection out of a cross of KS88032 (bx tritcale)/Heines VII (bx wheat) back crossed twice to Celia. The initial cross was made in 1986 in Corvallis, OR. Subsequent backcrosses to F-1 and F-2 occurred in 1987 and 1988, also in Corvallis. Additional work using head-to-row selections and plantings were made each year in Pendleton, OR from the S-1 in 1989 through S-13 generations in 2001. The procedure followed the head-to-row selection method directed towards the development of a productive, yet awnless forage variety with as low a level of sterility as possible. Breeder seed was first produced in Imbler, OR. in summer 2002.

Statement of Stability and Uniformity

Within the parameters provided under Variants Occurring in Forerunner, the variety has been stable and uniform for at least 6 generations.

This stated to me, Fred B. Ledeboer, by the breeder, Dr. Mathias Kolding, on January 6, 2006.

Statement of Uniformity and Stability

According to the breeders of Forerunner, Dr. Robert Metzger and Dr. Mathias Kolding, the variety has been observed as uniform and stable for more than six generations.

In the testing of Forerunner for this PVP Application which comprised 60 plants no variants were observed at either testing location.

Variants Occurring in Forerunner Triticale

1. At about 1 in 25000 plants
Normal symmetrical head, awns 1 to 5 cm long, angled outward 10 to 15°, glumes light green, plants usually 10 to 25 cm taller
2. At about 1 in 50000 plants
Normal symmetrical head, awns 1 to 5 cm long, angled outward 10 to 15°, glumes reddish, plant height normal or 10 to 20 cm taller.
3. At about 1 in 100000 plants
Head nonsymmetrical and 3 to 5 cm shorter than normal, spike width (viewing spikelets sideways) about 2.5 to 3 cm, spike depth (viewing spikelets at 90° from previous aspect) 1.5 to 2 cm, rachis within spike curved towards wide side of axis 15 to 20°, awns 1 to 5 cm long angled outward at 30 to 40°.

P.S. According to the breeder, Dr. Mathias Kolding, these anomalies are allowed in commercial production (certified) but are to be rogued from pre-breeder to breeder seed production.

(see attached: Addendum to description of PI 629011)

Exhibit B

Statement of Distinctness

Forerunner is a tall very leafy forage variety of Triticale. It is most similar to RSI-102 in that both are distinctly awnletted and rather tall types. Forerunner, however, differs in the following characteristics:

1. Forerunner is 20 to 30 cm shorter than the very tall RSI-102
2. Forerunner has distinctly wider leaves that are recurved vs. upright positioned leaves on RSI-102.
3. Forerunner is heading 6 to 8 days earlier than RSI-102
4. Seed of Forerunner is larger and heavier than RSI-102 at 57.8 g vs. 53.5 g per 1000 kernels.

Statement on Comparison Testing and Test Procedures for the Triticale Variety
Forerunner

The comparison tests for Forerunner were carried out during the 2003 growing season at two locations in Western Oregon. Aurora, Marion County and Crabtree, Linn County are situated about 60 miles apart in the Willamette Valley. Aurora has a clay loam soil with adequate drainage, and Crabtree is located on sandy loam river bottom soil. Forerunner was compared with three other varieties in the same class; these were 102, 815, and 762.

Procedure

1. 2-12-03, seeds were germinated in an unheated greenhouse..
2. When seedlings reached the three-leaf stage, they were potted out singly and allowed to develop to the three-tiller stage in the unheated greenhouse.
3. 3-30-03, 30 plants of each variety were transplanted into the field and set out in a 2' x 2' spaced planting, supplied with 16-16-16-6(S) fertilizer at 160 lbs./ac., and allowed to develop.
4. Measurements of the various parameters were made on June 6, 2003 at both locations.
5. Seed was harvested and measured on July 9, 2003.

8

TABLE I

**Comparison of Several Morphological Characteristics of Forerunner Triticale
With three Comparison Varieties**

| Variety | Leaf Length in cm | | | Leaf Width in mm | | | Plant Height in cm | | | Heading Date | |
|-----------------------|----------------------|----------|------|---------------------|----------|------|-----------------------|----------|-------|--------------|-------------|
| | Aurora | Crabtree | Av | Aurora | Crabtree | Av | Aurora | Crabtree | Av | Aurora | Crabtree Av |
| Forerunner | 33.0 | 33.5 | 33.3 | 23.0 | 23.0 | 23.0 | 128 | 131 | 129 | 5/1 | 5/2 5/2 |
| RSI 102 | 21.5 | 22.0 | 21.7 | 19.5 | 20.0 | 19.7 | 151 | 163 | 157 | 5/7 | 5/9 5/8 |
| RSI 762 | 27.5 | 27.5 | 27.5 | 20.0 | 20.0 | 20.0 | 93 | 107 | 103 | 5/5 | 5/5 5/5 |
| RSI 815 | 26.0 | 27.0 | 26.5 | 18.5 | 19.0 | 18.7 | 102 | 104 | 103 | 5/1 | 5/1 5/1 |
| Average | 27.0 | 27.5 | 27.3 | 20.3 | 20.5 | 20.4 | 118.5 | 126.3 | 122.4 | 5/3 | 5/4 5/4 |
| LSD 0.05 | 1.1 | 1.2 | | 0.4 | 0.4 | | 5.8 | 6.1 | | 1.8 | 1.6 |
| for Location LSD 0.05 | | | 1.8 | | | 0.5 | | | 8.6 | | .8 |

Note: 30 plants per variety for each location

30 data points for each characteristic per variety

BELTSVILLE, MARYLAND 20705
OBJECTIVE DESCRIPTION OF VARIETY

TRITICALE

| | |
|---|--|
| NAME OF APPLICANT(S) Weaver Seed of Oregon, Inc. & Oregon Trail Seeds, Inc. | VARIETY NAME OR TEMPORARY DESIGNATE), Forerunner |
| ADDRESS (Street and No., or F.F.D. No., City, State, and ZIP Code) P.O. Box 67 Crabtree, OR 97335 | FOR OFFICIAL USE ONLY PVPO NUMBER 200400161 |

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e-s- or) when number is either 99 or less or 9 or less.

1. GROWTH HABIT:

| | | | | |
|--------------------------------|------------------------|------------------|--------------------|-----------|
| <input type="text" value="2"/> | 1 = SPRING | 2 = INTERMEDIATE | 3 = WINTER | |
| <input type="text" value="3"/> | Juvenile Plant Growth: | 1 = PROSTRATE | 2 = SEMI PROSTRATE | 3 = ERECT |
| <input type="text" value="2"/> | Photo period: | 1 = INSENSITIVE | 2 = SENSITIVE | |

2. PLOIDY:

| | | | |
|---|----------------------|---------------|---------------------------|
| <input type="text" value="1"/> | 1 = HEXAPLOID | 2 = OCTOPLOID | 3 = OTHER (Specify) _____ |
| <input type="text" value="4"/> <input type="text" value="2"/> | 2n CHROMOSOME NUMBER | | |

3. MATURITY (50% Flowering):

| | | | | | |
|---|-------------------------|-----------|--|--|---------------|
| <input type="text" value="3"/> | 1 = VERY EARLY | 2 = EARLY | 3 = MIDSEASON | 4 = LATE | 5 = VERY LATE |
| <input type="text" value="0"/> <input type="text" value="7"/> | DAYS EARLIER THAN _____ | | | } 1 = CARMACK 2 = RSI-102 3 = PATHFINDER | |
| <input type="text" value="0"/> <input type="text" value="4"/> | DAYS LATER THAN _____ | | | | |
| | | | <input type="text" value="2"/> <input type="text" value="5"/> | 4 = 6TA 204 | 5 = RSI-762 |

4. HEIGHT:

| | | | | | |
|--|------------------------|--------------------------------|---------------------------------------|----------------|-----------|
| <input type="text" value="1"/> <input type="text" value="2"/> <input type="text" value="8"/> | CM. HIGH | <input type="text" value="4"/> | 1 = DWARF | 2 = SEMI DWARF | 3 = SHORT |
| <input type="text" value="2"/> <input type="text" value="5"/> | Cm. SHORTER THAN _____ | <input type="text" value="2"/> | 4 = MID TALL | 5 = TALL | |
| <input type="text" value="2"/> <input type="text" value="5"/> | Cm TALLER THAN _____ | <input type="text" value="3"/> | } 1 = CARMACK 2 = RSI-102 3 = RSI-815 | | |
| | | | 5 = RSI-762 | | |

5. PLANT COLOR AT BOOT STAGE:

| | | | |
|--------------------------------|------------------|-----------|----------------|
| <input type="text" value="2"/> | 1 = YELLOW GREEN | 2 = GREEN | 3 = BLUE GREEN |
|--------------------------------|------------------|-----------|----------------|

6. STEM:

| | | | | | |
|--------------------------------|-----------------|--------------|-------------|---------------------------|-----------|
| <input type="text" value="1"/> | Anthocyanin: | 1 = ABSENT | 2 = PRESENT | | |
| <input type="text" value="2"/> | Neck Hairiness: | 1 = NONE | 2 = SLIGHT | 3 = MODERATE | 4 = HEAVY |
| <input type="text" value="2"/> | Shape Of Neck: | 1 = STRAIGHT | 2 = WAVY | 3 = OTHER (Specify) _____ | |

7. LEAVES:

| | | | | | |
|--------------------------------|-----------------------------|-----------------|--------------|---|--|
| <input type="text" value="1"/> | Flag Leaf: | 1 = NOT TWISTED | 2 = TWISTED | <input type="text" value="3"/> <input type="text" value="1"/> | CM. LEAF LENGTH: 1st Leaf Below Flag Leaf |
| <input type="text" value="1"/> | Waxy Bloom On Leaf At Boot: | 1 = ABSENT | 2 = PRESENT | <input type="text" value="2"/> <input type="text" value="2"/> | MM. LEAF WIDTH: 1st Leaf Below Flag Leaf |
| <input type="text" value="2"/> | Leaf Carriage: | 1 = UPRIGHT | 2 = RECURVED | <input type="text" value="3"/> | Auricle Color: 1 COLORLESS OR WHITE 2 = PURPLE |
| | | 3 - DROOPING | | | 3 = OTHER (Specify) <u>TAN</u> |

Per correspondence

10

msh 2/6/20

8. HEAD:

| | | | | | | |
|--------------------------------|--------------------------------|-----------------|-----------------------|--------------------------------|--------------------------------|---------------------------|
| <input type="text" value="1"/> | Density: | 1 - LAX | 2 = MID DENSE | 3 - DENSE | | |
| <input type="text" value="1"/> | Shape: | 1 = FUSIFORM | 2 = OBLONG | 3 = CLAVATE | 4 = ELLIPTICAL | 5 = OTHER (Specify) _____ |
| <input type="text" value="3"/> | Awedness: | 1 = AWNLESS | 2 - APICALLY AWNLETED | 3 - AWNLETED | 4 = AWNED | |
| <input type="text" value="3"/> | Awn Color: | 1 - WHITE | 2 = YELLOW | 3 = TAN | 4 = BROWN | 5 = BLACK |
| <input type="text" value="1"/> | <input type="text" value="6"/> | CM. HEAD LENGTH | | <input type="text" value="2"/> | <input type="text" value="0"/> | MM. HEAD WIDTH |

9. GLUMES AT MATURITY:

| | | | | | | |
|--------------------------------|-------------|--------------|------------------------|---------------|--------------------------------|--|
| <input type="text" value="1"/> | Pubescence: | 1 = GLABROUS | 2 = SLIGHTLY PUBESCENT | 3 = PUBESCENT | | |
| <input type="text" value="3"/> | Color: | 1 = WHITE | 2 = YELLOW | 3 = TAN | 4 = BROWN | 5 = BLACK |
| <input type="text" value="3"/> | Length: | 1 = SHORT | 2 = MID LONG | 3 = LONG | <input type="text" value="2"/> | Width: 1 = NARROW 2 = MID WIDE 3 = WIDE |
| <input type="text" value="1"/> | Shoulder: | 1 = WANTING | 2 = OBLIQUE | 3 = ROUNDED | <input type="text" value="3"/> | Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE |
| | | 4 = SQUARE | 5 = ELEVATED | 6 = APICULATE | | |

10. COLEOPTILE COLOR:

| | | | |
|--------------------------------|-----------|-----------|------------|
| <input type="text" value="2"/> | 1 = WHITE | 2 = GREEN | 3 = PURPLE |
|--------------------------------|-----------|-----------|------------|

11. SEED:

| | | | | | | | |
|--------------------------------|--------------------------------|---------------------|-----------------------|-----------------|------------|-----------------|---------------------------|
| <input type="text" value="3"/> | Shape: | 1 = OVATE | 2 = OVAL | 3 = ELLIPTICAL | | | |
| <input type="text" value="1"/> | Smoothness: | 1 = SMOOTH | 2 = SLIGHTLY WRINKLED | 3 = WRINKLED | | | |
| <input type="text" value="1"/> | Brush Area: | 1 = SMALL | 2 = MIDSIZE | 3 = LARGE | | | |
| <input type="text" value="1"/> | Brush Length: | 1 = SHORT | 2 = MID LONG | 3 = LONG | | | |
| <input type="text" value="0"/> | Phenol Reaction: | 1 = IVORY | 2 = FAWN | 3 = LIGHT BROWN | 4 = BROWN | 5 = BROWN BLACK | |
| <input type="text" value="2"/> | Color: | 1 = WHITE | 2 = AMBER | 3 = RED | 4 = PURPLE | 5 = BLACK | 6 = OTHER (Specify) _____ |
| <input type="text" value="5"/> | <input type="text" value="8"/> | GMS. PER 1,000 SEED | | | | | |

12. DISEASE (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):

| | | | |
|--------------------------------|--------------------------|--------------------------------|-------------------------|
| <input type="text" value="1"/> | STEM RUST (Races) _____ | <input type="text" value="0"/> | LEAF RUST (Races) _____ |
| <input type="text" value="1"/> | STRIPE RUST (Race) _____ | <input type="text" value="0"/> | ERGOT |
| <input type="text" value="1"/> | POWDERY MILDEW _____ | <input type="text" value="0"/> | BACTERIAL STRIPE |
| <input type="text" value="1"/> | SEPTORIA | <input type="text" value="1"/> | YELLOW DWARF |
| <input type="text" value=""/> | OTHER (Specify) _____ | <input type="text" value=""/> | OTHER (Specify) _____ |

13. INSECT (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):

| | | | | | | | | | |
|--------------------------------|-----------------------|--------------------------------|----|--------------------------------|---|--------------------------------|---|--------------------------------|---|
| <input type="text" value="0"/> | GREEN BUG | HESSIAN FLY RACE: | | | | | | | |
| <input type="text" value="1"/> | CEREAL LEAF BEETLE | <input type="text" value="0"/> | GP | <input type="text" value="0"/> | A | <input type="text" value="0"/> | B | <input type="text" value="0"/> | C |
| <input type="text" value=""/> | OTHER (Specify) _____ | <input type="text" value="0"/> | D | <input type="text" value="0"/> | E | <input type="text" value="0"/> | F | <input type="text" value="0"/> | G |

14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

| CHARACTER | VARIETY |
|--------------------|---------|
| PLANT TILLERING | RSI-102 |
| WINTER HARDINESS | 0 |
| AREA OF ADAPTATION | 0 |
| SEED SHAPE | RSI-102 |

REFERENCES:

L. W. Briggie and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, USDA.

W. E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, Contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts.

COMMENTS:

Exhibit D

Additional Description

Forerunner is tall, stiff, facultative, mid-season, has a smooth to sparsely pubescence neck. Spike is fusiform, lax and awnletted, nodding at maturity. Glumes are cream colored, glabrous, long, narrow with shoulders wanting; beaks are narrow, acuminate, 0-2 mm long. Kernels are long, amber, soft, and narrowly elliptical. Brush is short. The Variety is a forage type with long, wide leaves. Winter growth is semi-prostrate, dark green and mid-cold hardy.

Certain anomalies may ensue during succeeding generations such as variations in height and elongated awns expressed due to different environs and/or gene expression. A portion of non-predictable percentages of male sterile spikes or spikelets as is commonly found in cereals may be due to weather anomalies, pesticide applications, or sudden temperature peaks during head formation and through anthesis.

Therefore, up to .5% elongated awns, some height differential, and/or sterile spikes or spikelets could be allowed. However, in breeder seed production from pre-breeder seed, all these aberrants must be rogued prior to anthesis.

Supplement to Exhibit C from GVRB application

Variety Name Forerunner

Experimental Designations X 2210

VARIETY DESCRIPTORS

TRITICALE (Triticosecale Forerunner)

1. DESCRIBE METHODS USED FOR TESTING AND EVALUATING VARIETY: 30 space plants at two locations (Aurora, OR and Crabtree, OR)
2. PLOIDY: (circle one) Hexaploid (2N=42) Octoploid (2N=56) Other _____
3. FACTORS OF ADAPTATION:
 - a. Reaction to photoperiod (circle one) ^{Level} ~~INSENSITIVE~~ SENSITIVE UNKNOWN
 - b. Winter hardiness (circle one or range) POOR FAIR GOOD
EXCELLENT LESS THAN EQUAL TO BETTER THAN
(known commercial variety/same market class)
 - c. Reaction to major diseases within area of adaptation (list)
None observed at both test locations
 - d. Reaction to major insects within area of adaptation (list)
None observed at both test locations
 - e. Other factors
- 4.* PLANT CHARACTERISTICS:
 - a. Habit of growth (circle one) WINTER FACULTATIVE SPRING
 - b. Coleoptile color (circle one) WHITE GREEN PURPLE
 - c. Juvenile plant growth (circle one) PROSTRATE SEMI-PROSTRATE ERECT
LESS THAN EQUAL TO MORE THAN
(known commercial variety/same market class)
 - d. Plant tillering (circle one) LOW INTERMEDIATE HIGH
LESS THAN EQUAL TO MORE THAN
(known commercial variety/same market class)
5. LEAVES: RHCC = 138B
 - a. Color at booting (circle one) YELLOW-GREEN GREEN BLUE-GREEN
OTHER _____ Appears most similar to _____
(known commercial variety/same market class)
 - b. Leaf carriage at booting (circle one) UPRIGHT RECURVED DROOPING
 - c. Flag leaf at booting
1) (circle one) TWISTED NOT TWISTED

* = HIGH PRIORITY DESCRIPTORS

4-2002

Variety Name ForerunnerExperimental Designation X 22102) Waxy bloom (circle one) ABSENT PRESENT

d. First leaf below flag leaf

1) Width in millimeters (circle one and indicate range) NARROW _____ to _____
MID-WIDE _____ to _____ WIDE 20 to 232) Length in millimeter (circle one and indicate range) SHORT _____ to _____
MID-LONG _____ to _____ LONG 28 to 35e. Color of auricles (circle one) WHITE PURPLE OTHER Tanf. Number of leaves originating from nodes above ground 5

6. TIME OF HEADING:

a. Relative (circle one) VERY EARLY EARLY MID-SEASON LATE VERY LATEb. 6-8 AVERAGE NUMBER OF DAYS EARLIER THAN RSI 102
(known commercial variety/same market class)OR3-4 AVERAGE NUMBER OF DAYS LATER THAN RSI 762
(known commercial variety/same market class)

7. STEM:

a. Anthocyanin in uppermost node (circle one) ABSENT PRESENTb. Diameter at 4 inches above ground 4 to 7 mmc. Strength (circle one or range) POOR FAIR GOODd. Pubescence present on neck of stem: (circle one or range) SLIGHTLY HAIRY MODERATELY HAIRY GLABROUS DENSELY HAIRYe. Length of internode between the flag leaf and the leaf below (indicate range)
28 to 31 centimetersf. Shape of neck (circle one) STRAIGHT WAVY OTHER _____

8.* PLANT HEIGHT:

a. Relative (circle one or range) DWARF SEMI-DWARF SHORT
MID-TALL TALLb. Average height 128 centimeters at maturity
Range 112 to 133 centimetersc. 20-30 centimeters taller than RSI 815
(known commercial variety/same market class)OR20-30 centimeters shorter than RSI 102
(known commercial variety/same market class)

* = HIGH PRIORITY DESCRIPTORS

Experimental Designation X2210

9. *

- a. Relative (circle one or range) VERY EARLY EARLY MID-SEASON LATE VERY LATE
- b. Total days to anthesis. after planting at optimum date 90 - 100 March Seeding
180 - 200 October Seeding
- c. Time of anthesis:
5 - 8 number of days earlier than RSI 102
(known commercial variety/same market class)
4 - 6 number of days later than RSI 815
(known commercial variety/same market class)

10.*

- a. Spike of this variety is most similar to RSI 102
(known commercial variety/same market class)
- b. Shape (circle one or range) FUSIFORM CLAVATE OBLONG ELLIPTICAL
OTHER _____
- c. Awtnedness (circle one) AWNLESS AWNLETTEO APICALLY AWNLETTEO
AWNED
- d. Size
1) Width (circle one) NARROW MID-WIDE WIDE
Range in width 18 to 22 mm
2) Length (circle one) SHORT MID-LONG LONG
Range in length 155 to 170 mm
- e. Density (circle one or indicate range)
1 2 3 4 5 6 7 8 9
(very lax) (mid-dense) (vayderw)
- f. Attitude at maturity (circle one or range)
ERECT SLIGHTLY RECURVED INCLINED
- g. Waxy bloom (circle one) ABSENT PRESENT
- h. Awns
1) Presence (circle one) AWNLESS AWNLETTEO APICALLY AWNLETTEO
AWNED
2) Length (circle one) SHORT MID-LONG LONG
Range in length 0.2 to 2.0 mm
3) Color (circle one) TAN BLACK YELLOW BROWN
OTHER _____

* = HIGH PRIORITY DESCRIPTORS

6-2002

Variety Name ForerunnerExperimental Designation X 2210

i. Shattering (circle one or range)
1 2 3 4 5 6 7 8 9
(very low) (very high)

j. Threshability (circle one or range)
1 2 3 4 5 6 7 8 9
(easy) (hard)

11.* GLUMES AT MATURITY:

- a. Color (circle one) WHITE, TAN YELLOW BROWN
BLACK OTHER _____
- b. Length (circle one and indicate range in millimeters)
MID-LONG _____ to _____ LONG 9 to 11 SHORT _____ to _____
- c. Width (circle one and indicate range in millimeters)
MID-WIDE 3.5 to 4.1 WIDE _____ to _____ NARROW _____ to _____
- d. Degree of pubescence (circle one)
GLABROUS SLIGHTLY PUBESCENT PUBESCENT
- e. Shoulder shape (circle one) WANTING OBLIQUE ROUNDED
SQUARE ELEVATED APICULATE OTHER _____
- f. Beak shape (circle one) ACUMINATE OBTUSE ACUTE
- g. Beak length - are there any known differences? X YES _____ NO
Describe: Vary from 0 to 2 mm

12. SEED CHARACTERISTICS:

- a.* Color (circle one) WHITE AMBERRED PURPLE
BLACK OTHER _____
- b.* Size (circle one) SMALL MEDIUM LARGE VERY LARGE
Average length 9.3 mm
Average width 3.7 mm
- c. Shape (circle one) OVATEOVAL ELLIPTICAL
- d. Surface texture (circle one) SMOOTH SLIGHTLY WRINKLED WRINKLED
- e. Brush area (circle one) SMALL MID-SIZE LARGE
- f. Brush length (circle one) SHORT MID-LONG LONG
- g. Average weight per 1,000 seeds 57.8 grams
- g. Seeds of this variety are most similar to RSI 102
(known commercial variety/same market class)

* = HIGH PRIORITY DESCRIPTORS

7-2002

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S)

Weaver Seed of Oregon Inc. & Oregon Trail Seeds Inc.
per Gary Weaver and Curt Howell
phone conversation 03/07/20062. TEMPORARY DESIGNATION
OR EXPERIMENTAL NUMBER

X2210

3. VARIETY NAME

Forerunner

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)

Weaver Seed of Oregon
P.O. Box 67
Crabtree, OR 97155

5. TELEPHONE (Include area code)

(541) 924-9701

6. FAX (Include area code)

(541) 924-9702

7. PVPO NUMBER

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.



YES



NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.



YES



NO

10. Is the applicant the original owner?



YES



NO

If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?



YES



NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?



YES



NO

If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

| | | |
|---|-----|--------------------|
| Forerunner was developed jointly by Drs. Matt Kolding | and | Robert Metzger |
| 1910 SW 44th | | 2126 53rd Ave. SE |
| Pendleton, OR 97801 | | Albany, OR 97322 |
| Tel.: 541.276.0274 | | Tel.: 541.928.3647 |

Both breeders jointly transferred ownership to the above named applicant

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit E

Oregon

200400161

Trail Seeds Inc.
Seed from the trail ~ Seed for the trail

Office/Warehouse, P.O. Box 7, North Powder, OR 97857-0007

Ph. (541) 898-7333 • Fax. (541) 898-5665

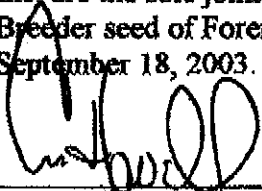
Seed Plant, 110 3rd St., Imbler, OR 97841

Ph. (541) 534-5655

March 12, 2004

To whom it may concern:

This letter is to inform you that Oregon Trail Seeds, Inc. and Weaver Seed of Oregon, Inc. are the sole joint owners of the Triticale variety known as Forerunner. The first Breeder seed of Forerunner was sold from Weaver Seed to Oregon Trail Seeds September 18, 2003.


Curt Howell, Owner
Oregon Trail Seeds, Inc.